

Ship Aug 10

Work Order ID 135256

135256

Page 1

Friday, August 07, 2015 1:37:08 PM

Item ID: D135-692-041 Accept *N900040100* Setup Start *NS1*

Revision ID:

Item Name: Bearpaw Wearplate Stop *NS2*

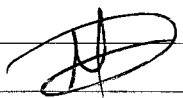
Start Date: 8/07/15 Start Qty: 1.00 *1*

Required Date: 8/10/15 Req'd Qty: 1.00 *1*

Cust Item ID:

Customer:

Reference:

Approvals: Process Plan:  Date: 5-8-7 Tooling: Date:

QC: Date: SPC (Y/N): Date:

Run Start *NR1*

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr								
DSI9400	Rev A		JA						
100	Document Control	0.00							DAS 02 9-89
100	DOCUMENT CONTROL								
DC	Memo	0.00							
Doc.Control -USB or Paperwork	Photocopy bluefile and create labels per PPP D135-692-041 CHG001								AUG 11 2015
	Pick kit.								
110	Packaging	0.00							
110	Packaging								
Packaging	Memo	0.00							
Packaging									
120	QC4- 100% Inspect kits for completeness	0.00							DAS 02 9-89
120									
QC	Memo	0.00							
Quality Control									AUG 11 2015

MLJ 1508-10

① JA . AUG 07 2015

DAS
26
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐		Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐					
OTHER : ☐									

Work Order ID 135256***135256***

Page 2

Friday, August 07, 2015 1:37:08 PM

Item ID: D135-692-041 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Bearpaw Wearplate
Start Date: 8/07/15 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 8/10/15 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130		0.00							DAS
130	Packaging								02
Packaging	Memo	0.00							8-89
Packaging	Identify and pack for shipping as per PPP D135-692-041 CHG001 Location: FG128 PPP Rev: _____								AUG 11 2015
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.00							MCS AUG 11 2015
Quality Control									MCS AUG 11 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																											
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																																																								
Description Work Order Deviation				Disposition				Completed By																																																							
								Lead hand / Supervisor Approval Verification																																																							
								QC / QA Coordinator Approval																																																							
Root Cause		FAULT CATEGORY																																																													
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER :	
Misidentified ☐	Past Due ☐																																																														

Picklist Print

Friday, August 07, 2015 1:37:54 PM

Page 1

Work Order ID: 135256

135256

Parent Item: D135-692-041

D135-692-041

Parent Item Name: Bearpaw Wearplate

Start Date: 8/07/15

Required Date: 8/10/15

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:A new issue ECN1089 08-02-04 DD verified by:EC
IPP Rev:B ECN 1132 08-02-20 DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MS21042L4		Purchased	No			110	Each	2,822.000	8	8			

MS21042L 4

Locknut

JA

AUG 07 2015

**DAS
02
9-89**

Location

Loc Qty

Loc Code

FP001

2

m124231

2

GA

134

m127813

134

ST260a

170

m130799

56

m131803

6

m132262

108

ST305

2516

m128300

8

m128798

12

m130388

7

m130922

97

m131618

12

m132123

56

m132382

2324

**DAS
28
9-89**

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QS1042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

Picklist Print

Friday, August 07, 2015 1:37:54 PM

Work Order ID: 135256

135256

Parent Item: D135-692-041

D135-692-041

Parent Item Name: Bearpaw Wearplate

Start Date: 8/07/15

Required Date: 8/10/15

Start Qty: 1.00

Required Qty: 1.00

AN4-15A Purchased No

120 Each 231.0000 8 8

AN4-15A

JA

Bolt **DAS**
02
9-89

Location

Loc Qty

Loc Code

GA	40	
120449	40	
ST325A	3	
m132317	3	
ST343	188	
m132551	188	

8

D3719-041 Manufactured No

120 Each 5.0000 2 2

D3719-041

JA

Wearplate **DAS**
02
9-89

Location

Loc Qty

Loc Code

ST617	5	
121056	5	

2

NAS1149D0463J Purchased No

120 Each 3,150.000 8 8

NAS1149D0463.J

JA

AUG 07 2015

WASHER

DAS
02
9-89

Location

Loc Qty

Loc Code

GA	41	
M129390	41	
ST260a	1000	
M132677	1000	
ST269	2109	
M127904	20	
M129682	86	
M130799	371	
M132035	1507	
M132317	125	

8

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : ☐					

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D135-692 REV. A

REF. FAA STC: SR01042SE

The D135-692-041 Wearplate Kit can be installed on Dart D135-692-011 Bearpaw Installations. The D3719-041 Wearplates should be installed on the D3049-1 Bearpaws as shown in Figure 1 on sheet 2 of this service instruction. The bearpaw should otherwise be installed on the skidtube per installation instructions IIN-D135-692 Rev. A.

WEIGHT AND BALANCE

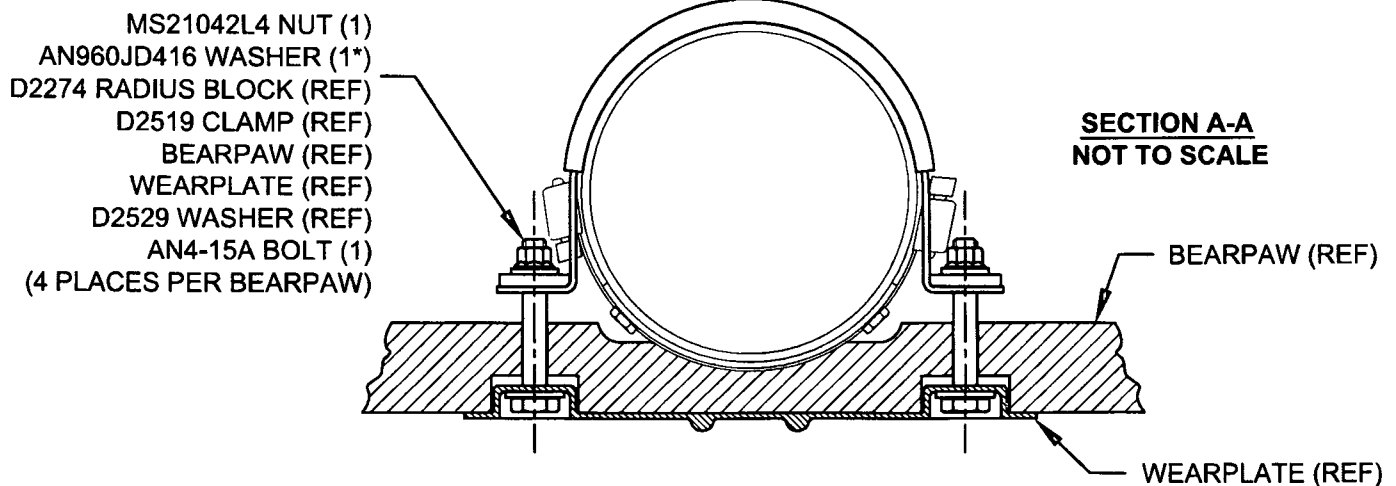
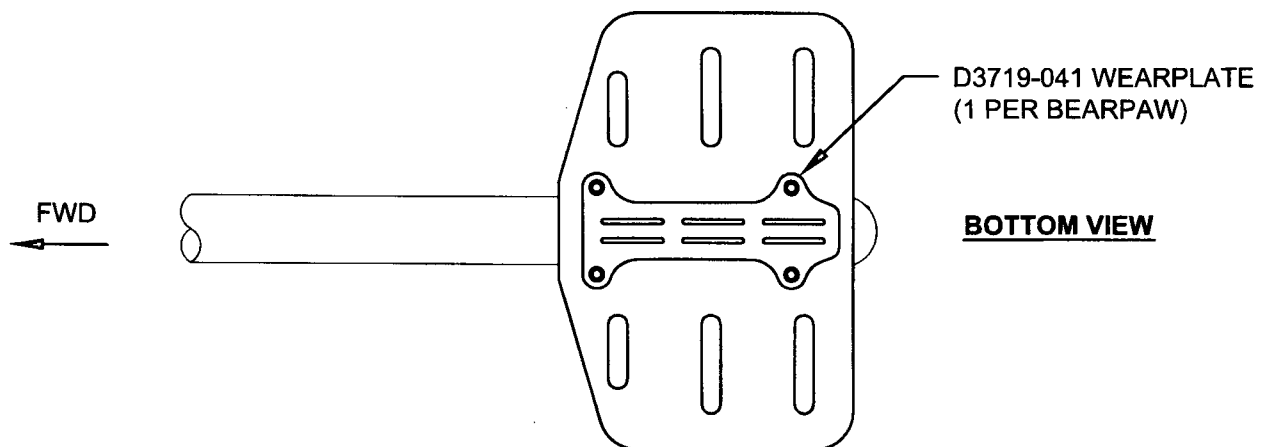
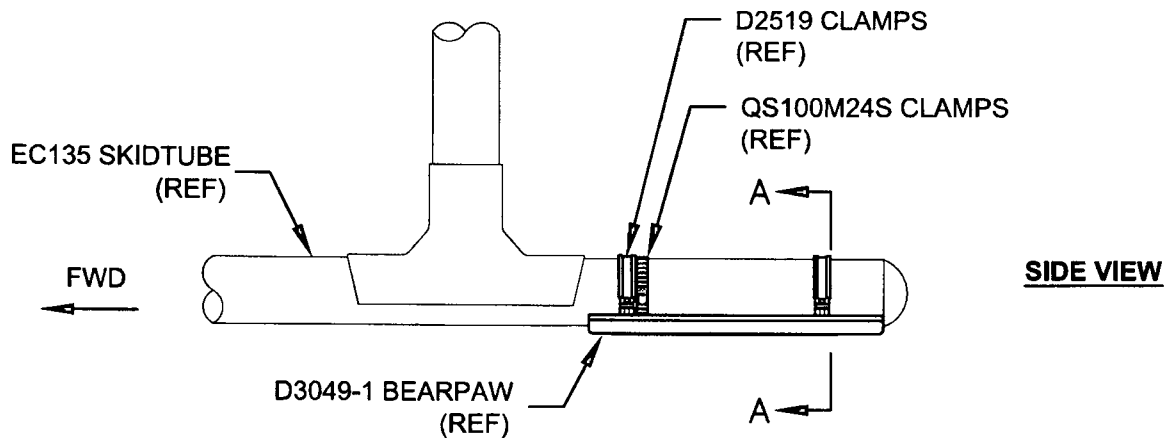
Installation	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
D135-692-041	2.24 lb	0.0 in	0.0 in-lb	199.7 in	447 in-lb
Wearplate Kit	1.0 kg	0.0 m	0.0 m-kg	5.07 m	5.1 m-kg

PARTS LIST

QTY	Part Number	Description
X	D135-692-041	Wearplate Kit
2	D3719-041	Wearplate
8	AN4-15A	Bolt
8	AN960JD416	Washer
8	MS21042L4	Nut (or MS21042-4)

A	NEW ISSUE	CP	07.12.12
REV.	DESCRIPTION	BY	DATE
DESIGN	<i>q</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	<i>q</i>		
CHECKED	<i>1-0</i>	REV. A SHEET 1 OF 2	
MFG. APPR.	<i>E</i>		
APPROVED	<i>1-0</i>	SCALE NTS	
DE APPR.	<i>7</i>		
DATE	07.12.12	COPYRIGHT © 2007 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

FIGURE 1: D135-692-041 WEARPLATE KIT



* ADDITIONAL AN960JD416 WASHERS MAY BE INSTALLED UNDER THE NUTS TO ENSURE 1.5-4 THREADS IN SAFETY ON THE BOLTS. IT IS ALSO ACCEPTABLE TO REPLACE THE AN4-15A BOLTS WITH LONGER OR SHORTER AN4 BOLTS, IF REQUIRED.

DESIGN	qp	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	qp		
CHECKED	160	DRAWING NO.	REV. A
MFG. APPR.	160	DSI 9400	SHEET 2 OF 2
APPROVED	160	TITLE	SCALE
DE APPR.	160	WEARPLATE KIT	NTS
DATE	07.12.12	COPYRIGHT © 2007 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

REFERENCE ONLY

DAS
02
9-89

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D135-692 REV. A
REF. FAA STC: SR01042SE

The D135-692-041 Wearplate Kit can be installed on Dart D135-692-011 Bearpaw Installations. The D3719-041 Wearplates should be installed on the D3049-1 Bearpaws as shown in Figure 1 on sheet 2 of this service instruction. The bearpaw should otherwise be installed on the skidtube per installation instructions IIN-D135-692 Rev. A.

WEIGHT AND BALANCE

Installation	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
D135-692-041	2.24 lb	0.0 in	0.0 in-lb	199.7 in	447 in-lb
Wearplate Kit	1.0 kg	0.0 m	0.0 m-kg	5.07 m	5.1 m-kg

PARTS LIST

QTY	Part Number	Description
X	D135-692-041	Wearplate Kit
2	D3719-041	Wearplate
8	AN4-15A	Bolt
8	AN960JD416	Washer
8	MS21042L4	Nut (or MS21042-4)

A	NEW ISSUE	CP	07.12.12
REV.	DESCRIPTION	BY	DATE
DESIGN	<i>q</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	<i>q</i>		
CHECKED	<i>AD</i>	DRAWING NO. REV. A	
MFG. APPR.	<i>E</i>	DSI 9400 SHEET 1 OF 2	
APPROVED	<i>AD</i>	TITLE SCALE	
DE APPR.	<i>H</i>	WEARPLATE KIT NTS	
DATE	07.12.12	COPYRIGHT © 2007 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	